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ABSTRACT

These fact sheets focus on exercising for improved physical fitness. Answers to common questions about exercise are presented. An outline is provided on two exercise programs--walking and jogging. A discussion is presented on how to start an exercise program. A chart provides information on heart rates for different ages and the length of exercise time required to obtain and sustain a desirable rate. (JD)

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FACTS ABOUT...EXERCISE:

Sample Exercise Programs

How to Get Started

What is Fact and What is Fiction?

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# FACTS ABOUT...

## Exercise: Sample Exercise Programs

There are many ways to begin an exercise program; two examples are included here, a walking and a jogging program. These activities are easy ways for most people to get regular exercise because they do not require special facilities or equipment other than good, comfortable shoes. If walking or jogging does not meet your needs, look for other exercise programs in pamphlets and books on aerobic exercise and sports medicine or look for an exercise program at a community facility.

### Effective Ways to Avoid Injuries

For most people, a gradual, sensible exercise program will have minimal health risks. However, you should consult a doctor before you start if you experience one or more of the following:

- You frequently have pains or pressure—in the left or midchest area, left neck, shoulder or arm—during or right after you exercise; often feel faint or have spells of severe dizziness; experience extreme breathlessness after mild exertion;
- You are over age 60 and not accustomed to vigorous exercise or your father, mother, brother, or sister had a heart attack before age 50;
- Or your doctor said you have heart trouble, a heart murmur, or have had a heart attack; uncontrolled high blood pressure; bone or joint problems; or a medical condition not mentioned here which might need special attention in an exercise program.

Once you start on an exercise program, you can help avoid injuries if you:

1. Build up your level of activity gradually over the weeks to come.
2. Listen to your body for early warning pains.
3. Be aware of possible signs of heart problems such as:
  - Pain or pressure in the left or mid-chest area, left neck, shoulder, or arm during or just after exercising.  
(Vigorous exercise may cause a side stitch while exercising—a pain below your bottom ribs—which is not the result of a heart problem.)

• Sudden dizziness, cold sweat, pallor, or fainting. Ignoring these signals and continuing to exercise may lead to serious heart problems. Should any of these signs occur, stop exercising and call your doctor.

4. For outdoor activities, take appropriate precautions under special weather conditions.

On hot, humid days:

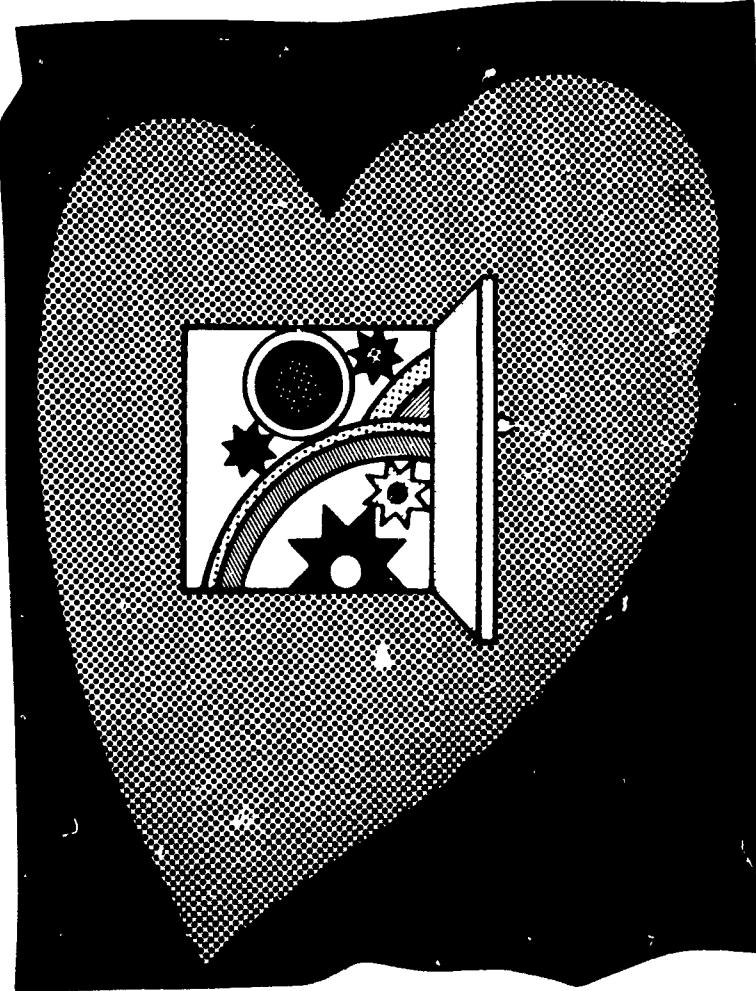
- Exercise less than normal for a week until you become adapted to the heat
- Drink lots of fluids, particularly water. You do not need extra salt because you get enough salt in your diet. Also, a well-conditioned body learns to conserve salt so that most of the sweat is water.

- Watch out for signs of heat stroke—feeling dizzy, weak, lightheaded, and/or excessively tired; sweating stops; or body temperature becomes dangerously high.

On cold days:

- Wear one layer less of clothing than you would wear if you were outside but not exercising. It's also better to wear several layers of clothing rather than one heavy layer.
- Wear a hat, since up to 40 percent of your body's heat is lost through your neck and head.

5. Another handy tip is if you've eaten a meal, avoid strenuous exercise for at least 2 hours. If you exercise vigorously first, wait about 20 minutes before eating.



## **Sample Exercise Programs**

The exercise patterns for both of the sample exercise programs are suggested guidelines. Listen to your body and build up less quickly, if needed. If you find a particular week's pattern tiring, repeat it before going on to the next pattern. You do *not* have to complete the walking program in 12 weeks or the jogging program in 15 weeks.

### **A Walking Program**

	Warm up	Target Zone exercising	Cool down	Total time
<b>Week 1</b>				
Session A	Walk slowly 5 min.	Then walk briskly 5 min.	Then walk slowly 5 min.	15 min.
Session B	Repeat above pattern.			
Session C	Repeat above pattern.			
Continue with at least three exercise sessions during each week of the program				
<b>Week 2</b>	Walk slowly 5 min.	Walk briskly 7 min.	Walk slowly 5 min.	17 min.
<b>Week 3</b>	Walk slowly 5 min.	Walk briskly 9 min.	Walk slowly 5 min.	19 min.
<b>Week 4</b>	Walk slowly 5 min.	Walk briskly 11 min.	Walk slowly 5 min.	21 min.
<b>Week 5</b>	Walk slowly 5 min.	Walk briskly 13 min.	Walk slowly 5 min.	23 min.
<b>Week 6</b>	Walk slowly 5 min.	Walk briskly 15 min.	Walk slowly 5 min.	25 min.
<b>Week 7</b>	Walk slowly 5 min.	Walk briskly 18 min.	Walk slowly 5 min.	28 min.
<b>Week 8</b>	Walk slowly 5 min.	Walk briskly 20 min.	Walk slowly 5 min.	30 min.
<b>Week 9</b>	Walk slowly 5 min.	Walk briskly 23 min.	Walk slowly 5 min.	33 min.
<b>Week 10</b>	Walk slowly 5 min.	Walk briskly 26 min.	Walk slowly 5 min.	36 min.
<b>Week 11</b>	Walk slowly 5 min.	Walk briskly 28 min.	Walk slowly 5 min.	38 min.
<b>Week 12</b>	Walk slowly 5 min.	Walk briskly 30 min.	Walk slowly 5 min.	40 min.

#### **Week 13 on:**

Check your pulse periodically to see if you are exercising within your heart rate Target Zone. Your maximum heart rate is the fastest your heart can beat. The best activity level is 60 to 75 percent of this maximum rate—this range is called your heart rate Target Zone. To find your heart rate Target Zone, subtract your age from 220. Then multiply your answer by .60 (60 percent). The number you get is how fast your heart should beat beats per minute at the 60 percent level. (For example, if you are 40:  $220 - 40 = 180$ .  $180 \times .60 = 108$  beats per minute.) As you get more in shape, try exercising within the upper range of your heart rate Target Zone. Remember that your goal is to continue getting the benefits you are seeking and enjoying your activity.

## A Sample Jogging Program

If you are over 40 and have not been active, you should not begin with a program as strenuous as jogging. Begin with the walking program instead. After completing the walking program, you can start with week 3 of the jogging program below.

	Warm up	Target Zone exercising	Cool down	Total time
<b>Week 1</b>				
Session A	Stretch and limber up for 5 min.	Then walk 10 min. Try not to stop	Then walk slowly 3 min and stretch 2 min.	20 min.
Session B	Repeat above pattern.			
Session C	Repeat above pattern.			
Continue with at least three exercise sessions during each week of the program				
<b>Week 2</b>	Stretch and limber 5 min.	Walk 5 min., jog 1 min., walk 5 min., jog 1 min.	Walk slowly 3 min., stretch 2 min.	22 min.
<b>Week 3</b>	Stretch and limber 5 min.	Walk 5 min., jog 3 min., walk 5 min., jog 3 min.	Walk slowly 3 min., stretch 2 min.	26 min.
<b>Week 4</b>	Stretch and limber 5 min.	Walk 4 min., jog 5 min., walk 4 min., jog 5 min.	Walk slowly 3 min., stretch 2 min.	28 min.
<b>Week 5</b>	Stretch and limber 5 min.	Walk 4 min., jog 5 min., walk 4 min., jog 5 min.	Walk slowly 3 min., stretch 2 min.	28 min.
<b>Week 6</b>	Stretch and limber 5 min.	Walk 4 min., jog 6 min., walk 4 min., jog 6 min.	Walk slowly 3 min., stretch 2 min.	30 min.
<b>Week 7</b>	Stretch and limber 5 min.	Walk 4 min., jog 7 min., walk 4 min., jog 7 min.	Walk slowly 3 min., stretch 2 min.	32 min.
<b>Week 8</b>	Stretch and limber 5 min.	Walk 4 min., jog 8 min., walk 4 min., jog 8 min.	Walk slowly 3 min., stretch 2 min.	34 min.
<b>Week 9</b>	Stretch and limber 5 min.	Walk 4 min., jog 9 min., walk 4 min., jog 9 min.	Walk slowly 3 min., stretch 2 min.	36 min.
<b>Week 10</b>	Stretch and limber 5 min.	Walk 4 min., jog 13 min.	Walk slowly 3 min., stretch 2 min.	27 min
<b>Week 11</b>	Stretch and limber 5 min.	Walk 4 min., jog 15 min.	Walk slowly 3 min., stretch 2 min	29 min.
<b>Week 12</b>	Stretch and limber 5 min.	Walk 4 min., jog 17 min.	Walk slowly 3 min., stretch 2 min.	31 min.

continued

## **A Sample Jogging Program**

continued

Week 13	Stretch and limber 5 min.	Walk 2 min., jog slowly 2 min., jog 17 min	Walk slowly 3 min., stretch 2 min	31 min
Week 14	Stretch and limber 5 min.	Walk 1 min., jog slowly 3 min., jog 17 min	Walk slowly 3 min., stretch 2 min	31 min
Week 15	Stretch and limber 5 min.	Jog slowly 3 min., jog 17 min	Walk slowly 3 min., stretch 2 min.	30 min

### **Week 16 on:**

Check your pulse periodically to see if you are exercising within your heart rate Target Zone. As you become more fit, try exercising within the upper range of your heart rate Target Zone. Remember that your goal is to continue getting the benefits you are seeking and enjoying your activity.

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## **An exercise prescription for your health**

Feel Better  
 Look Better  
 Do Better  
 Enjoy life more fully!

**Exercise briskly at least 15-30 minutes  
 three times a week**



# FACTS ABOUT...

## Exercise: How to Get Started

### Which exercises help condition my heart and lungs?

Exercises that improve the condition of your heart and lungs must be:

**Brisk**—raising heart and breathing rates.

**Sustained**—done at least 15 to 30 minutes without interruption.

**Regular**—repeated at least three times per week.

All exercises do not give you the same conditioning benefits for your heart and lungs. There are three different types of activities.

### TYPE 1: Exercises that do condition heart and lungs.

Cross-Country Skiing  
Hiking (uphill)  
Ice Hockey  
Jogging  
Jumping Rope  
Rowing  
Running in Place  
Stationary Cycling

These exercises are naturally very vigorous. They need to be done for at least 15 minutes, three times a week. Then they will condition your heart and lungs, burn off a lot of calories, and give you many other benefits such as more energy and greater resistance to stress.

### TYPE 2: Exercises that can condition heart and lungs if done briskly.

Bicycling  
Downhill Skiing  
Basketball  
Calisthenics  
Field Hockey  
Handball  
Racquetball  
Soccer  
Squash  
Swimming  
Tennis (singles)  
Walking

These activities are moderately vigorous but can be excellent conditioners, if done briskly for at least 30 minutes, three times a week. When done briskly, they give the same benefits as the type 1 activities.

### TYPE 3: Exercises that do not condition heart and lungs.

Baseball  
Bowling  
Football  
Golf (on foot or by cart)  
Softball  
Volleyball

These activities by nature are not vigorous or sustained. They still have certain benefits—they can be enjoyable, help improve coordination and muscle tone, and help relieve tension. However, they neither condition the heart and lungs nor burn off many calories.

### The Key to Success

The key to a successful exercise program is choosing an activity (or activities) that you will enjoy. Here are some questions that can help you choose the right kind of exercise for you:

1. How physically fit are you?
2. How old are you?
3. What benefits do you want from exercising?
4. Do you like to exercise alone or with other people?
5. Do you prefer to exercise outdoors or in your home?
6. How much money are you willing to spend for sports equipment or facilities?
7. When can you best fit the activity into your schedule?

By choosing activities you like, you will be much more likely to exercise regularly, keep on exercising, and enjoy its many benefits.

### Should I consult a doctor before I start exercising?

Most people do not need to see a doctor before they start since a gradual, sensible exercise program will have minimal health risks. However, there are some people who should seek medical advice. To find out if you should consult a doctor before you start, use the following check list.

### Mark those items that apply to you:

- Your doctor said you have heart trouble, a heart murmur, or you have had a heart attack.

- You frequently have pains or pressure—in the left or midchest area, left neck, shoulder, or arm—during or right after you exercise.

- You often feel faint or have spells of severe dizziness.

You experience extreme breathlessness after mild exertion.

- Your doctor said your blood pressure was too high and is not under control. Or you don't know whether or not your blood pressure is normal.

- Your doctor said you have bone or joint problems such as arthritis.

- You are over age 60 and not accustomed to vigorous exercise.

- Your father, mother, brother, or sister had a heart attack before age 50.

- You have a medical condition not mentioned here which might need special attention in an exercise program. (For example, insulin-dependent diabetes.)

If you've checked one or more items, talk to your doctor before you start. If you've checked no items, you can start on a gradual, sensible exercise program tailored to your needs.

### How do I pace myself?

Build up slowly. No matter where you begin, you will be able to build up your exercise time or pace as your body becomes more fit. You can find out how hard to exercise by keeping track of your heart rate. Your maximum heart rate is the fastest your heart can beat. The best activity level is 60 to 75 percent of this maximum rate. This 60-75 percent range is called your heart rate Target Zone.

When you begin your exercise program aim for the lower part of your heart rate Target Zone (60 percent) during the first few months. As you get into better shape, gradually build up to the higher part of your Target Zone (75 percent). After 6 months or more of regular exercise, you can exercise at up to 85 percent of your maximum heart rate—if you wish. However, you do not have to exercise that hard to stay in good condition.

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To find your heart rate Target Zone, look for the age category closest to your age and read the line across. For example, if you are 43, the closest age on the chart is 45; your heart rate target zone is 105 to 131 beats per minute.

Age	Heart Rate Target Zone 60-75%	Average Maximum Heart Rate 100%
20 years	120-150 beats per min. (60-75% of 200 beats)	200 beats per minute
25 years	117-146 beats per min.	195
30 years	114-142 beats per min.	190
35 years	111-138 beats per min.	185
40 years	108-135 beats per min.	180
45 years	105-131 beats per min.	175
50 years	102-127 beats per min.	170
55 years	99-123 beats per min.	165
60 years	96-120 beats per min.	160
65 years	93-116 beats per min.	155
70 years	90-113 beats per min.	150

Your maximum heart rate is usually 220 minus your age. However, the above figures are averages and should be used as general guidelines.

To see if you are within your heart rate Target Zone, take your pulse immediately after you stop exercising. Count it for 30 seconds and multiply by two. If your pulse is below your Target Zone, exercise a little harder the next time. If you're above your Target Zone, exercise a little easier. And if it falls within the Target Zone, you're doing fine. Once you're exercising within your Target Zone, you should check your pulse at least once each week during the first 3 months and periodically thereafter.

#### How long should I exercise?

Each exercise session should last from about 25 to 40 minutes and include:

5 min. *Warm Up*  
15-30 min. *Exercising in Your Heart Rate Target Zone* (15 to 30 minutes is your goal—begin with a shorter period and build up gradually)  
5 min. *Cool Down*

25-40 min. *Total*

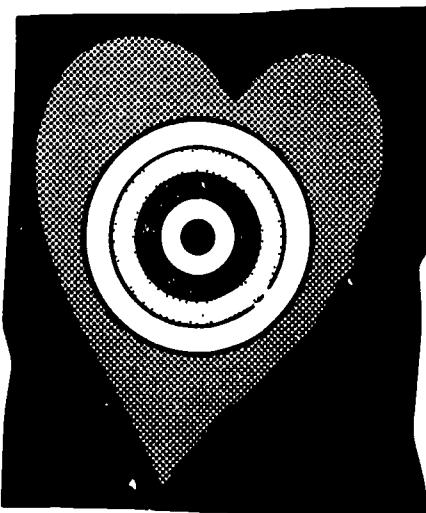


#### An exercise prescription for your health

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Look Better  
Do Better

Enjoy life more fully!

**Exercise briskly at least 15-30 minutes three times a week**





# FACTS ABOUT...

## Exercise: What is fact and what is fiction?

**Do you know which of these are fact and which are fiction? Circle your answer.**

1. Exercising gives you more energy. *Fact or Fiction*
  2. All exercises do not give you the same benefits. *Fact or Fiction*
  3. Exercising takes too much time. *Fact or Fiction*
  4. The older you are, the less exercise you need. *Fact or Fiction*
  5. You do not have to be athletic to exercise. *Fact or Fiction*
1. **Fact.** As their bodies get more in shape, most people feel exercising gives them even more energy than before. Regular, brisk exercise can also help you resist fatigue and stress.
2. **Fact.** All physical activities can give you enjoyment. But only regular, brisk, and sustained exercises such as brisk walking, jogging, or swimming improve the efficiency of your heart and lungs and burn off a lot of calories. Other activities do not give you these benefits, although they may give you other benefits such as increased flexibility or muscle strength.
3. **Fiction.** Regular exercise does not have to take more than about 25 to 40 minutes, three times a week. Once you have established a comfortable exercise routine, exercising becomes a natural part of your life.
4. **Fiction.** With age we tend to become less physically active, and therefore need to make sure we are getting enough exercise. In general, middle-aged and older people benefit from regular exercise just as young people do. Age need not be a limitation. What is important, no matter what your age, is tailoring the exercise program to your own fitness level.
5. **Fact.** Most brisk activities do not require any special athletic abilities. In fact, many people who found school sports difficult have discovered that these other activities are easy to do and enjoyable.

### Exercise and Your Heart Health

We now know that there are several factors that can increase your risk for developing coronary artery disease—and thus the chances for a heart attack. Fortunately, exercise can help

reduce or eliminate some of these risk factors.

#### *High Blood Pressure*

Regular exercise is associated with lower blood pressure.

#### *Cigarette Smoking*

People who exercise vigorously and regularly are more likely to cut down or stop cigarette smoking.

#### *Diabetes*

People at normal weight are much less likely to develop diabetes. Exercise also decreases a diabetic's insulin requirements.

#### *Overweight*

Exercise can help individuals lose extra pounds or stay at ideal weight.

#### *High Levels of HDL*

High levels of HDL (one of the cholesterol carrying proteins in the blood and high density lipoproteins) have been linked to a decreased risk of coronary artery disease. Recent studies have shown that regular exercise significantly increases the levels of HDL.

In summary, current evidence suggests that a moderate amount of regular, brisk exercise may reduce your chances of having a heart attack. But remember that even if you exercise, it is important to reduce or eliminate any risk factors so that you can lower your chances of having a heart attack as much as possible.

For your heart health, exercise regularly; stop or cut down on your smoking; control high blood pressure with proper treatment; cut down on fats, cholesterol, and salt in your diet; and reduce if overweight.

#### **What If I've Had a Heart Attack?**

We do not know yet if regular, brisk exercise can reduce the risk of having another heart attack. However, regular exercise can improve the quality of your life—how you feel and look. It can help you do more than before without heart pain (angina) or shortness of breath.

If you've had a heart attack, you should consult your doctor to be sure you are following a safe and effective exercise program. Your doctor's guidance is particularly important

because it could help prevent heart pain and/or further damage from overexertion.

#### **Comparing the Benefits and the Risks**

Should you begin a regular exercise program? You can answer this question by considering the ways exercise can benefit you and weighing them against the possible risks.

#### *Potential Benefits*

More energy and capacity for work and leisure activities

Greater resistance to stress, anxiety, and fatigue and a better outlook on life

Increased stamina and strength

Improved efficiency of the heart and lungs

Loss of extra pounds and help in staying at ideal weight

Reduced risk of heart attack

#### *Potential Risks*

Muscle/joint injuries

Harm exhaustion/heat stroke on hot days (rare)

Aggravation of existing or hidden heart problems

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#### **An exercise prescription for your health**

Feel Better

Look Better

Do Better

Enjoy life more fully!

**Exercise briskly at least 15-30 minutes three times a week**

Whatever your age moderate physical activity can become a good health habit with lifelong benefits.